

Facility Name \_\_\_\_\_

# Biochemical Oxygen Demand

SM 5210 B.

IN

OUT

Analysis Date: \_\_\_\_\_ Chlorine Present Yes / No

Analyst: \_\_\_\_\_

Read Date: \_\_\_\_\_ Chlorine removed by: \_\_\_\_\_

Incubator Temp °C: \_\_\_\_\_

Time: \_\_\_\_\_

Dilution Water Prepared on \_\_\_\_\_

Dilution Water pH \_\_\_\_\_ SU

(Complete this box unless separate calibration form used.)

Analysis Date: Barometric Pressure/Temperature: \_\_\_\_\_ mm Hg/ \_\_\_\_\_ °C Meter/Probe Calibrated by: \_\_\_\_\_ Time: \_\_\_\_\_

Read Date: Barometric Pressure/Temperature: \_\_\_\_\_ mm Hg/ \_\_\_\_\_ °C Meter/Probe Calibrated by: \_\_\_\_\_ Time: \_\_\_\_\_

Sample ID	Sample Date	Grab or Comp	Bottle ID	Sample mL	Seed Added mL	Inhibitor Added ?	Setup Temp. °C	Initial DO mg/L	Final DO mg/L	DO Depletion mg/L	Seed Correction mg/L	Correction Depletion mg/L	BOD <sub>5</sub> (mg/L)	BOD <sub>5</sub> Average mg/L
Blank 1														
Blank 2														
Seed 1														
Seed 2														
G/GA														
G/GA														
Final 1														
Final 2														
Final 3														
Final Dup														
Pri Eff 1														
Pri Eff 2														
Raw 1														
Raw 2														
Raw 3														
Raw Dup														

Calculations: Calculate only those samples that have a Final DO greater than or equal to (≥) 1.0 mg/L and a DO Depletion greater than or equal to (≥) 2.0 mg/L

$$\text{Unseeded BOD}_5 \text{ (mg/L)} = \frac{\text{DO Depletion} \times 300 \text{ mL}}{\text{mL Sample}}$$

$$\text{Seeded BOD}_5 \text{ (mg/L)} = \frac{\text{Seed Corrected Depletion} \times 300 \text{ mL}}{\text{mL Sample}}$$

$$\text{Seed Correction} = \left[ \frac{\text{Seed 1 DO Depletion}}{\text{mL Seed Added}} + \frac{\text{Seed 2 DO Depletion}}{\text{mL Seed Added}} \right] \times \text{mL Seed Added to Samples}$$

2

$$\text{Seed Corrected Depletion} = \text{DO Depletion} - \text{Seed Correction}$$